



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of NAGARAJ et al.	)	
		Group Art Unit: 1775
Filed: August 16, 2001  For: ARTICLE HAVING AN IMPROV	)	Examiner: J. McNeil
For: ARTICLE HAVING AN IMPROV	ED PL	ATINUM-ALUMINUM-HAFNIUM
PROTECTIVE COATING		

## RESPONSE TO FINAL REJECTION

Mail Stop NON-FEE AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This application has been reviewed in light of the Office Action of February 21, 2003. Claims 1-15 are pending, and all claims stand rejected. In response, the following remarks are submitted. Reconsideration of this application is requested.

Claims 1, 2, 3, and 8 are rejected under 35 102 over Darolia '471. Applicant traverses this ground of rejection.

The following principle of law applies to sec. 102 rejections. MPEP 2131 provides: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the ... claim. The elements must be arranged as required by the claim..." [citations omitted] This is in accord with the decisions of the courts. Anticipation under section 102 requires 'the presence in a single prior art disclosure of all elements of a claimed invention arranged as in that claim.'

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Carella v. Starlight Archery, 231 USPQ 644, 646 (Fed. Cir., 1986), quoting Panduit Corporation v. Dennison Manufacturing Corp., 227 USPQ 337, 350 (Fed. Cir., 1985)

Thus, identifying a single element of the claim, which is not disclosed in the reference, is sufficient to overcome a Sec. 102 rejection.

## Claim 1 recites in part:

"substantially no added silicon...wherein the outer layer is substantially a single phase."

Darolia '471 has no such disclosure that Applicant can find. The explanation of the rejection does not suggest that Darolia '471 has any such disclosure.

Claims 2, 3, and 8 depend from claim 1 and incorporate this limitation.

There are other differences as well, but this distinction should be sufficient to distinguish the disclosure of the reference.

Accordingly, it is believed that claims 1, 2, 3, and 8 are patentable over this rejection.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Claims 1-15 are rejected under 35 USC 102 as anticipated by Darolia '282. Applicant traverses this ground of rejection.

Claims 1 and 9 each recites in part:

"substantially no added silicon...wherein the outer layer is substantially a single phase."

Darolia '282 has no such disclosure that Applicant can find. The explanation of the rejection does not suggest that Darolia '282 has any such disclosure.

The other claims depend from these independent claims 1 and 9 and incorporate this limitation.

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There are other differences as well, but this distinction should be sufficient to distinguish the disclosure of the reference.

Accordingly, it is believed that claims 1-15 are patentable over this rejection.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

## Response to Examiner's Arguments

The two rejections in this case are sec. 102 rejections, not sec. 103 rejections. As noted above "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Applicant takes it as agreed that each and every element is not found by being <u>expressly</u> described in the respective single prior art references, see the statements in the Office Action at page 3, lines 21-22 and page 4, lines 10-11.

The basis of the rejection must therefore be that each and every element is inherently described in the respective single prior art references.

Inherency is not to be taken lightly and not to be asserted unless there is good evidence to suggest that the asserted property or characteristic is necessarily present in the teachings of the prior art reference. The concept of inherency is not provided as a way to fill in the gaps in missing disclosure or teachings based upon speculation, unless the asserted property or characteristic may be shown to be necessarily present by objective evidence.

MPEP 2112-2113 sets forth the standards for basing a sec. 102 rejection on inherency. MPEP 2112 provides "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set

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of circumstances is not sufficient." <u>In re Robertson</u>, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." <u>Ex parte Levy</u>, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)"

As the Examiner is aware, metallurgical phase structures may vary widely as a function of many variables, even for a single composition and as a result of adding specific elements. For example, a slowly cooled composition may be single phase, whereas when rapidly cooled the same composition may have more than one phase.

In another example, paragraph [0022] of the present application discusses the issue of multiple phases in the outer layer. The role of silicon in producing the multiphase structure is discussed. All of the presently pending claims recite an absence of added silicon in the outer layer, see also paragraph [0018].

Regarding Darolia '471, there is no teaching of excluding added silicon from the outer layer, a limitation found in all of the rejected claims. Instead, col. 6, lines 17-19, the desirability of adding silicon is discussed.

Regarding Darolia '282, the language referring to phase gradients, col. 6, lines 45-41, would seem to clearly indicate that there must be multiple phases present, and therefore the "single phase" language of the claims is not met. Darolia '282 also discusses the desirability of adding silicon at several locations, see for example col. 2 at lines 5, 12, and 64, claim 1 at col. 10, line 52, and claim 5 at col. 11, line 8.

Because of these disclosures in the prior art and the recited limitations of the present claims, Applicant believes that there is very good reason to believe that both prior art references do not either contemplate or inherently have single-phase outer layers.

In any event, the Responses to Arguments section of the Office Action at pages 3-4 suggests that Applicant has not offered an argument or explanation that the references do not expressly or inherently disclose the claim recitations. Applicant trusts that the above discussion will provide that information. Additionally, the burden of establishing inherency is initially on the PTO, and there has been no such showing here. The burden requires that

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there be a showing that the asserted claim limitation will <u>necessarily</u> be present in the art, and that necessary result certainly has not been demonstrated here.

Applicant submits that the application is now in condition for allowance, and requests such allowance.

Respectfully submitted,

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Dated: May 16, 2003 Kurt L. Ehresman

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